

Appl. No. 09/736,345
Amdt. Dated July 16, 2004
Reply to Office Action of June 1, 2004

AMENDMENTS TO THE CLAIMS

1-11. (Canceled)

12. (Previously presented) A computer implemented method for building financial statements from accounting data from an accounting system capable of producing a trial balance, the method comprising:

receiving accounting data from an accounting system, the accounting data including trial balance data having a number of accounts and respective balances;
grouping the accounts into one or more financial statement items, wherein each account is associated with only one financial statement item within any one financial statement;
computing a financial statement item balance for each financial statement item based on the associated accounts and their respective balances;
grouping the financial statement items into one or more totals, wherein each total is based on preceding financial statement item balances; and
providing a financial statement that includes each financial statement item and its respective balance.

13. (Previously presented) The method of claim 12 further comprising:
providing a first level of detail for a user selected financial statement item, the first level of detail including any accounts and respective account balances grouped into that financial statement item.

14. (Previously presented) The method of claim 13 wherein each account is assigned an accounting direction, and an account balance is provided in parentheses if its direction is opposite the assigned accounting direction of that account.

15. (Previously presented) The method of claim 13 further comprising:
providing a second level of detail for a user selected account included in the selected financial statement item, the second level of detail including an account balance and transactions associated with the account balance.

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16. (Previously presented) The method of claim 15 wherein providing the second level of detail includes providing for at least one of form feeds and headers as required.
17. (Previously presented) The method of claim 15 further comprising:
providing a third level of detail for a user selected transaction included in the selected account, the third level of detail including at least one debited account and a corresponding credited account associated with the selected transaction, wherein a transaction is associated with more than one account in accordance with the double entry accounting principle.
18. (Previously presented) The method of claim 12 wherein each financial statement item is assigned an accounting direction, and a financial statement item balance is provided in parentheses if its direction is opposite the assigned accounting direction of that financial statement item.
19. (Previously presented) The method of claim 18 wherein the assigned accounting direction of a financial statement item is based on a direction associated with a first grouped account of the financial statement item.
20. (Previously presented) The method of claim 12 wherein receiving accounting data from an accounting system further comprises at least one of:
reading trial balance data stored on a computer readable medium by the accounting system; and
reading accounting transactions stored on a computer readable medium by the accounting system.
21. (Previously presented) The method of claim 12 wherein the method is integrated into accounting software.
22. (Previously presented) The method of claim 12 wherein the method is integrated into at least one of word processor software, spreadsheet software, and editing software.

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23. (Previously presented) The method of claim 12 wherein providing a financial statement includes displaying detail associated with any financial statement item balance to a user.

24. (Currently amended) The method of claim 12 further comprising:
dynamically allocating memory spaces for a plurality of doubly linked data structures for storing elements of the accounting data, thereby enabling reading, organizing, and manipulation of the accounting data of ~~an~~ the accounting system.

25. (Previously presented) The method of claim 12 further comprising:
dynamically allocating memory spaces for a trial balance data structure for storing the accounts of the accounting data, and linking elements of the trial balance data structure with a doubly linked list of pointers thereby allowing sub-lists to group the accounts into financial statement items; and
dynamically allocating memory spaces for a financial statement data structure for storing the financial statement items, and linking elements of the financial statement data structure with a doubly linked list of pointers thereby allowing sub-lists to group financial statement items into totals.

26. (Previously presented) The method of claim 25 wherein dynamically allocating memory spaces for a trial balance data structure further includes storing trial balance data into the trial balance data structure, the trial balance data structure including a LINKTRANS field for each account, the LINKTRANS field specifying an index of an associated pointer element in a LINK vector, each pointer element of the LINK vector indicating a memory address of a corresponding element in the trial balance data structure.

27. (Previously presented) The method of claim 25 wherein dynamically allocating memory spaces for a financial statement data structure further includes storing financial statement elements into the financial statement data structure, the financial statement data

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structure including a LINE type field for each element of the financial statement, each LINE type field specifying a type attributed to the corresponding financial statement element.

28. (Previously presented) The method of claim 27 wherein the types that can be specified in the LINE type field include a financial statement item type and a total type.

29. (Currently amended) The method of claim ~~25-12~~ wherein grouping the accounts into one or more financial statement items includes using doubly linked sub-lists of ~~trial balance data structure pointers to group the accounts into financial statement items.~~

30. (Currently amended) The method of claim ~~25-12~~ wherein grouping the financial statement items into one or more totals includes using doubly linked sub-lists of ~~financial statement data structure pointers to group the financial statement items into totals.~~

31. (Previously presented) The method of claim 25 further comprising:
maintaining a direction field in the trial balance data structure for each account, the direction field specifying an accounting direction thereby enabling a user to identify a transaction amount's effect on the corresponding account balance.

32. (Currently amended) The method of claim 12 further comprising:
~~dynamically allocating memory spaces for a doubly linked transaction data structure for storing transactions associated with the accounts, and linking the transactions to their respective accounts~~generating a report including form feeds and headers as required for each page of the report.

33. (Currently amended) The method of claim 12 further comprising:
~~generating a report including form feeds and headers as required for each page of the report~~dynamically allocating memory spaces for a doubly linked transaction data structure for storing transactions associated with the accounts, and linking the transactions to their respective accounts.

34. (Currently amended) The method of claim ~~32-33~~ wherein dynamically allocating memory spaces for a doubly linked transaction data structure further includes

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storing accounting transactions into the doubly linked transaction data structure, the transaction data structure including a LINKCHART field for each transaction line, the LINKCHART field specifying an index of an associated pointer in a LINK vector, each pointer of the LINK vector indicating a memory address of a corresponding element in the trial balance data structure.

35. (Previously presented) The method of claim 34 wherein an accounting direction for each accounting transaction amount is specified in a corresponding JOURNAL field included in the transaction data structure.

36. (Previously presented) The method of claim 34 wherein storing accounting transactions into the doubly linked transaction data structure further includes dynamically allocating memory spaces for display line structure elements, each display line structure element associated with a corresponding transaction data structure element.

37. (Previously presented) The method of claim 36 further comprising:
generating an account balance detail report using a list of display line structure pointers, thereby allowing sorted presentation of the transactions included in the account balance detail report.

38. (Previously presented) The method of claim 34 wherein storing accounting transactions into the doubly linked transaction data structure further includes linking each element of the transaction data structure to a corresponding element of a trial balance data structure with a doubly linked sub-list of display line structure pointers.

39. (Currently amended) A computer implemented method for building financial statements from accounting data from an accounting system capable of producing a trial balance, the method comprising:

receiving accounting data from an accounting system, the accounting data including trial balance data having a number of accounts and respective balances;

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grouping the accounts into one or more financial statement items, wherein each account is associated with only one financial statement item within any one financial statement;
computing a financial statement item balance for each financial statement item based on the associated accounts and their respective balances;
storing the financial statement items into a financial statement data structure, the financial statement data structure including a LINE type field for each line of ~~the a~~ financial statement, each LINE type field specifying a type attributed to the corresponding financial statement line, with the types including a financial statement item type and a total type; and
providing ~~a the~~ financial statement that includes each financial statement item and its respective balance.

40. (Previously presented) A computer implemented method for building financial statements from accounting data from an accounting system capable of producing a trial balance, the method comprising:

receiving accounting data from an accounting system, the accounting data including trial balance data having a number of accounts and respective balances;
dynamically allocating memory spaces for a trial balance data structure for storing the accounts of the accounting data, and linking elements of the trial balance data structure with a doubly linked list of pointers thereby allowing sub-lists to group the accounts into financial statement items;
computing a financial statement item balance for each financial statement item based on the associated accounts and their respective balances;
dynamically allocating memory spaces for a financial statement data structure for storing the financial statement items, and linking elements of the financial statement data structure with a doubly linked list of pointers thereby allowing sub-lists to group financial statement items into totals; and
providing a financial statement that includes each financial statement item and its respective balance.

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41. (Previously presented) The method of claim 40 wherein dynamically allocating memory spaces for a trial balance data structure further includes storing trial balance data into the trial balance data structure, the trial balance data structure including a LINKTRANS field for each account, the LINKTRANS field specifying an index of an associated pointer element in a LINK vector, each pointer element of the LINK vector indicating a memory address of a corresponding element in the trial balance data structure.

42. (Previously presented) The method of claim 40 wherein dynamically allocating memory spaces for a financial statement data structure further includes storing financial statement items into the financial statement data structure, the financial statement data structure including a LINE type field for each line of the financial statement, each LINE type field specifying a type attributed to the corresponding financial statement line, the types including a financial statement item type and a total type.

43. (Previously presented) The method of claim 40 further comprising:
dynamically allocating memory spaces for a doubly linked transaction data structure
for storing transactions associated with the accounts, and linking the
transactions to their respective accounts.

44. (Previously presented) The method of claim 43 further comprising:
optimizing allocation of memory spaces for storing transactions included in the
accounting data by storing a debited account and a corresponding credited
account in a single element of the transaction data structure, as well as in an
associated element of a display line data structure, thereby reducing the number
of memory spaces that must be allocated for storing transactions.

45. (Previously presented) The method of claim 44 further comprising:
maintaining a direction field in the trial balance data structure for each account, the
direction field specifying which accounts have been identified as control
accounts during the optimizing.

46. (Previously presented) The method of claim 44 further comprising:

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computing a theoretical balance during transaction checking processes; and
displaying the theoretical balance throughout the transaction checking processes,
thereby eliminating a need to print reconciliation reports during these
transaction checking processes to establish whether an account balance has
been reconciled successfully.

47. (Previously presented) The method of claim 44 wherein dynamically allocating memory spaces for a doubly linked transaction data structure further includes storing accounting transactions into the doubly linked transaction data structure, the transaction data structure including a LINKBANK field for each transaction line, the LINKBANK field specifying an index of an associated pointer in a LINK vector, each pointer of the LINK vector indicating a memory address of a corresponding element in the trial balance data structure.

48. (Currently amended) A method for organizing accounting data in data structures used for building financial statements from accounting data from an accounting system capable of producing a trial balance, the method comprising:

dynamically allocating memory spaces for a trial balance data structure for storing accounts included in the accounting data, and linking elements of the trial balance data structure with a doubly linked list of pointers thereby allowing sub-lists to group the accounts into financial statement items;

dynamically allocating memory spaces for a financial statement data structure for storing the financial statement items, and linking elements of the financial statement data structure with a doubly linked list of pointers thereby allowing sub-lists to group financial statement items into totals; and

storing financial statement items into the financial statement data structure, the financial statement data structure including a LINE type field for each line of ~~the a~~ financial statement, each LINE type field specifying a type attributed to the corresponding financial statement line, the types including a financial statement item type and a total type.

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49. (Previously presented) The method of claim 48 wherein dynamically allocating memory spaces for a trial balance data structure further includes storing trial balance data into the trial balance data structure, the trial balance data structure including a LINKTRANS field for each account, the LINKTRANS field specifying an index of an associated pointer element in a LINK vector, each pointer element of the LINK vector indicating a memory address of a corresponding element in the trial balance data structure.

50. (Previously presented) The method of claim 48 further comprising:
dynamically allocating memory spaces for a doubly linked transaction data structure for storing transactions associated with the accounts, and linking the transactions to their respective accounts.

51. (Previously presented) The method of claim 50 wherein dynamically allocating memory spaces for a doubly linked transaction data structure further includes storing accounting transactions into the doubly linked transaction data structure, the data structure including a LINKCHART field for each transaction line, the LINKCHART field specifying an index of an associated pointer in a LINK vector, each pointer of the LINK vector indicating a memory address of a corresponding element in the trial balance data structure.

52. (Previously presented) A computer readable medium encoded with software, that when executed by a processor, causes the processor to carry out a process for building financial statements, the process comprising:

- receiving accounting data from an accounting system, the accounting data including trial balance data having a number of accounts and respective balances;
- grouping the accounts into one or more financial statement items, wherein each account is associated with only one financial statement item within any one financial statement;
- computing a financial statement item balance for each financial statement item based on the associated accounts and their respective balances;
- grouping the financial statement items into one or more totals, wherein each total is based on preceding financial statement item balances; and

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providing a financial statement that includes each financial statement item and its respective balance.

53. (Currently amended) A computer readable medium encoded with software, that when executed by a processor, causes the processor to carry out a process for building financial statements, the process comprising:

receiving accounting data from an accounting system, the accounting data including trial balance data having a number of accounts and respective balances;
grouping the accounts into one or more financial statement items, wherein each account is associated with only one financial statement item within any one financial statement;
computing a financial statement item balance for each financial statement item based on the associated accounts and their respective balances;
storing the financial statement items into a financial statement data structure, the financial statement data structure including a LINE type field for each line of ~~the a~~ financial statement, each LINE type field specifying a type attributed to the corresponding financial statement line, with the types including a financial statement item type and a total type; and
providing a ~~the~~ financial statement that includes each financial statement item and its respective balance.

54. (Previously presented) A computer readable medium encoded with software, that when executed by a processor, causes the processor to carry out a process for building financial statements, the process comprising:

receiving accounting data from an accounting system, the accounting data including trial balance data having a number of accounts and respective balances;
dynamically allocating memory spaces for a trial balance data structure for storing the accounts of the accounting data, and linking elements of the trial balance data structure with a doubly linked list of pointers thereby allowing sub-lists to group the accounts into financial statement items;

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computing a financial statement item balance for each financial statement item based on the associated accounts and their respective balances;
dynamically allocating memory spaces for a financial statement data structure for storing the financial statement items, and linking elements of the financial statement data structure with a doubly linked list of pointers thereby allowing sub-lists to group financial statement items into totals; and
providing a financial statement that includes each financial statement item and its respective balance.

55. (Currently amended) A computer readable medium encoded with software, that when executed by a processor, causes the processor to carry out a process for organizing accounting data in data structures used for building financial statements, the process comprising:

dynamically allocating memory spaces for a trial balance data structure for storing accounts included in the accounting data, and linking elements of the trial balance data structure with a doubly linked list of pointers thereby allowing sub-lists to group the accounts into financial statement items;
dynamically allocating memory spaces for a financial statement data structure for storing the financial statement items, and linking elements of the financial statement data structure with a doubly linked list of pointers thereby allowing sub-lists to group financial statement items into totals; and
storing financial statement items into the financial statement data structure, the financial statement data structure including a LINE type field for each line of ~~the a~~ financial statement, each LINE type field specifying a type attributed to the corresponding financial statement line, the types including a financial statement item type and a total type.